

## WHAT IS CLAIMED IS:

1. An ion activity-measuring device for measuring activity of an ion in a sample, which comprises a hydrophobic bridge of which portion contacting with a liquid reservoir is hydrophilic.
2. The ion activity-measuring device according to Claim 1, wherein the hydrophobic bridge is produced from at least one selected from the group consisting of polyester, nylon, polypropylene, rayon and polyethylene.
3. The ion activity-measuring device according to Claim 1 or 2, wherein the hydrophobic bridge is produced by treating the portion contacting with the liquid reservoir with a spreading accelerator.
4. The ion activity-measuring device according to Claim 3, wherein the spreading accelerator is at least one selected from the group consisting of a surfactant and a hydrophilic polymer.
5. The ion activity-measuring device according to Claim 1, wherein the liquid reservoir is formed by bonding a cover plate and a substrate, at least one of which has a resist film having a liquid reservoir form, and the hydrophobic bridge is made of nonwoven fabric.
6. A method for producing the ion activity-measuring

device as defined in Claim 5, comprising embedding nonwoven fabric in the cover plate to bond the nonwoven fabric to the cover plate.

7. The method according to Claim 6, wherein the nonwoven fabric and the cover plate are bonded by ultrasonic fusion.

8. The method according to Claim 6, wherein the nonwoven fabric and the cover plate are bonded by knurling fusion.